CLAIMS

1 A backlight device comprising:

a light diffusion plate disposed between a transmission type display panel and a light source unit in which plural light source blocks where a large number of light emitting diodes are mounted are arranged with a predetermined spacing therebetween, and adapted to allow a portion of rays of display light which have been emitted from the respective light emitting diodes to be transmitted therethrough, and to allow the other portion thereof to be reflected thereon to deliver the rays of display light thus obtained to the transmission type display panel in the uniformed state from the entire surface thereof,

wherein the light diffusion plate is formed by resin material having light transmission characteristic, and is adapted so that light adjustment patterns are formed within respective regions facing the respective light emitting diodes of plane surfaces opposite to the light source blocks to reflect the rays of display light, the light adjustment patterns being formed by attaching light reflection ink, and

the respective light adjustment patterns are formed so as to take a shape which has dimensions including an outer shape of the light emitting diode, and such that longitudinal width in a direction perpendicular to lateral width in a length direction of the respective light source blocks is caused to be

major axis.

2 The backlight device as set forth in claim 1,

wherein the respective light adjustment patterns are gradation patterns each constituted by a large number of light adjustment dots, these light adjustment dots being formed such that light transmission factor of rays of display light is caused to be gradually large from the central region toward the peripheral region.

3 A transmission type liquid crystal display apparatus comprising:

a transmission type liquid crystal panel;

a light source unit in which plural source blocks where a large number of light emitting diodes are mounted are arranged with a predetermined spacing therebetween, the light source unit being adapted for delivering, from the rear face side of the liquid crystal panel, rays of display light which have been emitted from the respective light emitting diodes;

an optical functional sheet laminated body in which plural functional optical sheets are laminated, and adapted for suitably converting the rays of display light to guide the rays of display light thus obtained to the transmission type display panel;

a diffusion light guide plate for diffusing, therewithin, the rays of display light which have been incident from one surface side to deliver the rays of display light thus diffused from the other surface side to the optical

functional sheet laminated body;

a light diffusion plate oppositely disposed with a predetermined spacing with respect to the diffusion light guide plate, and adapted for allowing a portion of the rays of display light to be transmitted therethrough and to allow the other portion thereof to be reflected thereon to deliver the rays of display light thus obtained to the diffusion light guide plate in uniformed state from the entire surface thereof; and

a reflection sheet oppositely disposed with a predetermined spacing with respect to the light diffusion plate at the rear face side of the light source unit, and adapted for allowing the rays of display light which have been emitted in an outer circumferential direction from the respective light emitting diodes and the rays of display light which have been reflected on the light diffusion plate to be reflected toward the light diffusion plate side,

wherein the light diffusion plate is formed by resin material having light transmission characteristic, and is adapted so that light adjustment patterns are formed within respective regions facing the respective light emitting diodes of plane surfaces opposite to the light source blocks to reflect the rays of display light, the light adjustment patterns being formed by attaching light reflection ink, and

the respective light adjustment patterns are formed so as to take a shape which has dimensions including an outer shape of the light emitting

diode, and such that the longitudinal width in a direction perpendicular to lateral width in a length direction of the respective light source blocks is caused to be major axis.

4 The transmission type liquid crystal display apparatus as set forth in claim 3,

wherein the respective light adjustment patterns are gradation patterns each constituted by a large number of light adjustment dots, these light adjustment dots being formed so that light transmission factor of rays of display light is caused to be gradually large from the central region toward the peripheral region.